



# Launch Mission Execution Forecast

**Mission:** Falcon 9 Starlink 5-6

**Issued:** 3 May 2023 / 0830L (1230Z)

**Valid:** 4 May 2023 / 0319 – 0712L (0719 – 1112Z)



**Forecast Discussion:** A weak surface boundary that is currently moving across central Florida is bringing in a reinforcing push of cooler and drier air across the region. There is some upper-level moisture associated with the boundary and this is allowing some cirrus clouds to move across central Florida. This trend will continue into tonight with respect to cloud cover. Expect only a small chance for cumulus clouds and a chance for upper-level clouds. Therefore, the primary weather concern for tonight will be the Cumulus Cloud Rule.

In the event of a 24-hour delay, more of the same type of weather expected to continue. A surface high pressure over the southeast US will shift a little eastward toward the east coast. This will cause the northwest winds over the Space Coast to shift more to the east. Otherwise, the dry conditions will maintain only a small potential for cumulus clouds. Therefore, the primary weather concern for the backup day will be from the Cumulus Cloud Rule.

Launch Day		Probability of Violating Weather Constraints <sup>1</sup>					
Launch Day	<b>5%</b>	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria <sup>2</sup>		
	<b>Weather/Visibility:</b> None / 7 mi.	<b>Clouds</b>				<b>Upper-Level Wind Shear:</b>	Low
	<b>Temp/Humidity:</b> 61°F / 78%	Type	Coverage	Base (ft)	Tops (ft)	<b>Booster Recovery Weather:</b>	Low
<b>Liftoff Winds (200'):</b> 330° 12 - 17 mph	Cumulus	Few	2,000	4,000	<b>Solar Activity:</b>	Low	
		Cirrus	Few	25,000	28,000		
24-Hour Delay		Probability of Violating Weather Constraints					
24-Hour Delay	<b>5%</b>	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria		
	<b>Weather/Visibility:</b> None / 7 mi.	<b>Clouds</b>				<b>Upper-Level Wind Shear:</b>	Low
	<b>Temp/Humidity:</b> 68°F / 76%	Type	Coverage	Base (ft)	Tops (ft)	<b>Booster Recovery Weather:</b>	Low
<b>Liftoff Winds (200'):</b> 080° 10 - 15 mph	Cumulus	Few	2,000	4,000	<b>Solar Activity:</b>	Low	
Notes	<ol style="list-style-type: none"> <li>The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring any random time during the launch window.</li> <li>Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each risk factor.</li> </ol>						
	See <a href="https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf">https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf</a> for more information						
Next Forecast Will Be Issued		As required					